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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,189	05/11/2007	Huzeir Lekovic	62632	7476

63417 7590 10/15/2009

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EXAMINER	
COONEY, JOEIN M	
ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
10/15/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

GARYCOHN@SEATTLEPATENT.COM

Office Action Summary	Application No.	Applicant(s)	
	10/564,189	LEKOVIC ET AL.	
	Examiner	Art Unit	
	John Cooney	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,15 and 16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,15 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicant's arguments filed 7-13-09 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 9, 11-13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rotermund et al.(6,284,812) in view of Guidetti et al.(5,789,451).

Rotermund et al. discloses preparations of rigid polyurethane foams prepared by applying foam forming materials including isocyanate, polyol, blowing agent, catalyst, And additives into substrate containing cavities wherein ranges of isocyanate Index values for managing isocyanate and polyol reactive effects meeting at the endpoints of the range of Index values of applicants' claims are employed and densities of products formed meet the ranges of values defined by applicants' claims (see column 1 line 6 – column 4 line 66 and the examples, as well as, the entire document).

Rotermund et al. discloses isocyanate reactive materials having functionalities meeting the requirements of applicants' claims, and distinction based on this claim feature is not seen (column 2 lines 29-35, as well as, the full teaching).

Rotermund et al. discloses use of initiators such tetravalent toluenediamine in preparing its polyols which meets the requirements of applicants' claim 9.

As to the Index values of applicants' claims, Rotermund et al. discloses Index values for managing isocyanate and polyol reactive effects meeting at the endpoints of the range of Index values of applicants' claims. It would have been obvious for one having ordinary skill in the art to have controlled Index values as provided by Rotermund et al. within the teachings of Rotermund et al. for the purpose of managing isocyanate and polyol reactive effects in the preparations of Rotermund et al. in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Additionally, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller,* 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of the same properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch,* 617 F.2d 272,205 USPQ 215 (CCPA 1980). Further, it is noted that control of Index values, particularly, changes from higher than one to closer to one has expected effects on the polyol/isocyanate, such as, decreased isocyanurate group formation. Further, as volume ratios of isocyanate to polyol are values controlled by NCO index and molecular weights of respective reactants, both of which are modulated within Rotermund et al.'s disclosure, distinction based on these ranges of values in applicants' claims is not seen beyond differences addressed above.

Rotermund et al. differs from applicants' claims in that it does not employ carbamates of alkanolamines provided in non-aqueous medium as blowing agents in its preparations. However, Guidetti et al. (see abstract & column 2 line 47-column 3 line 2, as well as, the entire document) discloses these blowing agents in a non-aqueous medium to be acceptable for performing the blowing function in polyurethane foam synthesis and for providing enhanced abrasion resistance in product produced therefrom. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the blowing agents of Guidetti et al. as the blowing agents in the preparations of Rotermund et al. for the purpose of imparting their acceptable blowing function and enhanced abrasion resistance in products formed in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Rotermund et al. provides for auxiliaries and/or additives (column 4) in its disclosure. Though plasticizers are not specifically mentioned, they are well known additives in the art for their plasticizing/softening effect and their use in the preparations of Rotermund et al. would have been obvious with the expectation of success in the absence of a showing of new or unexpected results.

Cream times are values associated with the compositional and reactive effects of the compositions disclosed, and difference based on these values are not seen to be evident without difference in the compositional and/or reactive effects being shown.

Claims 6, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rotermund et al.(6,284,812) in view of Guidetti et al.(5,789,451) as applied to claims 1-5, 9, 11-13, 15 and 16 above, and further in view of WO 02/079340.

Rotermund et al. differs from applicants' claims in that it does not employ amine terminated polyethers in its preparations. However, WO-'340(see pages 8-10, as well as, the entire document) discloses these polyols to be well known for their isocyanate reactive effect in producing rigid foams with good reinforcing effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the amine terminated polyethers of WO-'340 as isocyanate reactants in the preparations of Rotermund et al. for the purpose of imparting their acceptable isocyanate reactive effect in producing rigid foams with good reinforcing effects in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Rotermund et al. differs from applicants' claims in that it does not employ isocyanate terminated prepolymers or prepolymers that include hydroxyl functional (meth)acrylates. However, WO-'340(see page 2, as well as, the entire document) discloses these prepolymers to be well known for their urethane forming reactive effect in producing rigid foams with good reinforcing effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the hydroxyl functional (meth)acrylates of WO-'340 as isocyanate reactants in the preparations of Rotermund et al. for the purpose of imparting their acceptable urethane forming reactive effects in producing rigid foams with good reinforcing effects in order to arrive at the processes of

applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Additionally, and alternatively to the position above regarding plasticizers, WO-'340 discloses their employment in the isocyanate component for purposes of improving handling and processing and softening the physical properties (see pages 6 bridging 7). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the plasticizers of WO-'340 in the isocyanates of Rotermund et al. for the purpose of imparting their handling and processing improving and softening effects in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments regarding the above rejections under 35 USC 103 have been considered. However, rejection is maintained. It is held and maintained that the load bearing sandwich elements identified by Rotermund et al. (column 4 lines 65-66) are sufficient in meeting the automotive part as defined by applicants' claims. The secondary Guidetti et al. reference is maintained to be properly looked to for its disclosure of the acceptability of the use of the indicated blowing agents for purposes of imparting the effects indicated in articles formed. Accordingly, it is maintained that applicants' have not demonstrated non-obvious differences in the processes of their claims associated with this claim feature. Further, it is seen that applicants have not demonstrated new or unexpected results that are commensurate in scope with the claims attributable to this feature of their claims.

As to applicants' questions regarding which blowing agent might be replaced, it is not seen that these concerns negate the rejection based on the combined teachings of the cited prior art. One looking to assist, contribute to and/or perform the foaming function and contribute to the appearance maintaining effects afforded by abrasion resistance in articles formed in Rotermund et al. would have looked to the teaching of Guidetti et al. Guidetti et al., though not specifically directed towards forming rigid foams, is analogous art in that it is, at least, reasonably pertinent to the particular problem with which the inventor was involved.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13, 15 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 11/403,658, alone, or in view of WO 02/079340. The claims of 10/564,189 discloses preparations of rigid polyurethane foams prepared by applying foam forming materials including isocyanate, polyol, blowing agent, and catalyst as claimed into substrate containing cavities including ranges of isocyanate Index values and density values meeting those of applicants' claims. The claims of 11/403,658 differ from applicants' claims in specifics of material selection, ratios of amounts and functionalities. However, the claims of 11/403,658 disclose control of these features for purposes of providing acceptable products such operation within the variability of the compositional make-ups disclosed by the claims of 11/403,658 for the purpose of providing acceptable product formation in order to arrive at the processes of applicants' claims would have been obvious to one having ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection.

Applicants' arguments have been considered. However, rejection is maintained. Applicants' intention to address this rejection upon indication of allowable subject matter is acceptable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/

Primary Examiner, Art Unit 1796